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10/624,634

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EXAMINER

LAMB, CHRISTOPHER RAY

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/624,634	Applicant(s) LEE ET AL.	
	Examiner Christopher R. Lamb	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 7-11, 14, 15, 17, 22, 23 and 30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-11, 14, 15, 17, 22, 23 and 30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>1/22/08</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 30 is objected to because of the following informality: in line 4, "illuminates laser beam" should be "illuminates a laser beam." Appropriate correction is required.

Information Disclosure Statement

2. The information disclosure statement filed January 22nd, 2008 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

Specifically, there is no English explanation of the listed Japanese office action.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 1, 2, 22, and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Kuroda et al. (US 6,028,834).

Regarding claim 1:

Kuroda discloses:

An optical information storage medium, comprising:

a user data area for recording user data (column 3, lines 20-40); and
an area other than the user data area (management areas: column 3, lines 30-40), comprising:

a reproduction-only area (column 1, lines 50-60) ; and
a recordable area wherein disk state data is recorded in the recordable area when a recording of a predetermined data is completed (column 4, line 65 to column 5, line 10),

wherein the disk state data includes at least one of an address of a predetermined area of an optimum power control (OPC) area, and an address of a predetermined area of a drive data area (column 5, lines 10-20).

Regarding claim 2:

Kuroda discloses:

wherein the predetermined area of the OPC comprises an area containing newly recorded optimum power control data (column 5, lines 10-20).

Regarding the second element ("the predetermined area of the drive data area comprises an area containing most recently recorded drive data"):

claim 1 only required "at least one" of the OPC address or the drive data area address. Therefore this claim also requires only one.

Regarding claim 22:

Kuroda discloses a method of access an area on an optical storage medium where new user data is to be recorded, comprising:

recording, in a predetermined area of the optical storage medium, data about a disk state, when a recording of user data is completed, wherein the data about the disk state includes at least one of an address of an area containing newly recorded optimum power control (OPC) data, an address of an area containing most recently recorded drive data, and an address of an area containing most recently recorded user data (column 5, lines 1-10), and

when new user data is to be recorded, accessing an area on the optical storage medium where new user data is to be recorded, using recorded data about the disk state (column 5, lines 10-20).

Regarding claim 30:

Kuroda discloses:

An apparatus for recording and/or reproducing data on an information storage medium comprising a user data area and an area other than the user data area, comprising:

a pickup which illuminates laser beam on the optical storage medium (Fig. 2: 3, 5); and

a controller which controls the pickup to record and/or reproduce the data on and/or from the optical storage medium (Fig. 2: 11),

wherein an area other than the user data area comprises a reproduction-only area and a recordable area wherein disk state data is recorded in the recordable area when a recording of a predetermined data is completed (column 4, line 65 to column 5, line 10),

wherein disk state data includes at least one of an address of a predetermined area of an optimum power control (OPC) area and an address of a predetermined area of a drive data area (column 5, lines 10-20).

5. Claims 8-11, 14, 22, and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Kondo (US 5,177,720).

Regarding claim 8:

Kondo discloses:

A method of recording data on an optical information storage medium in which a reproduction-only area and a recordable area are included in an area other than a user data area (column 4, lines 1-15), the method comprising:

recording user data in the user data area (column 6, lines 35-50); and

recording disk state data in the recordable area included in the area other than the user data area, if a recording of user data is completed (column 7, lines 35-55),

wherein the disk state data includes at least one of an address of a predetermined area of an optimum power control area, an address of a predetermined area of a drive data area, and data representing whether an additional recording is possible after the recording of user data is completed (column 7, lines 15-55: the information recorded includes the finishing time of all programs, which itself indicates whether additional recording is possible).

Regarding claim 9:

These claim limitations are not relevant. Claim 1 listed three alternate possibilities for the disc state data, and required only one to meet the claim. That is still

true for claim 9. These limitations further define the OPC and drive data alternatives, but since Kondo discloses the third alternative, meeting these limitations is not necessary to meet this claim.

Regarding claim 10:

In Kondo the area other than the user data area corresponds to a lead-in area, and new data about the disk state is recorded in the recordable area as a part of the lead-in area (column 7, line 65 to column 8, line 25).

Regarding claim 11:

In Kondo when data about the disk state is updated, recording the new data about the disk state in an area next to an area containing most recently recorded disk state data (column 7, line 65 to column 8, line 25).

Regarding claim 14:

In Kondo, when data about the disk state is updated, the new data about the disk state is recorded in an area next to an area containing a most recently recorded disk state data (column 7, line 65 to column 8, line 25).

Regarding claim 22:

Kondo discloses a method of accessing an area on an optical storage medium where new user data is to be recorded, comprising:

recording, in a predetermined area of the optical storage medium, data about a disk state, when a recording of user data is completed (column 7, line 15 to column 8, line 25),

wherein the data about the disk state includes at least one of an address of an area containing newly recorded optimum power control (OPC) data, an address of an area containing most recently recorded drive data, an address of an area containing most recently recorded user data, and data representing whether an additional recording is possible after the recording of user data is completed (it is the address of the area containing most recently recorded user data: column 7, lines 35-55); and

when new user data is to be recorded, accessing an area on the optical storage medium where the new user data is to be recorded, using recorded data about the disk state (column 7, line 15 to column 8, line 25).

Regarding claim 23:

In Kondo the predetermined area of the optical storage medium is a recordable area of a lead-in area on the optical storage medium (column 7, lines 40-55).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kondo in view of Fukushima et al. (US 2001/0036136).

Regarding claim 17:

Kondo discloses a method as discussed above.

Kondo discloses wherein the recordable area comprises a disk zone, and the recording of the new data about the disk state comprises:

recording data about the the disk states in the disk zone (the intermediate information is information about the disk state: column 7, lines 40-50).

Kondo does not discloses:

an optimum power control zone, and recording data for optimal power control in the optimal power control zone, and

a drive zone, and recording drive-related data in the drive zone.

Fukushima discloses an optimum power control zone (Fig. 4: 409), and recording data for optimal power control in the optimal power control zone (paragraphs 138, 142), and

a drive zone (Fig. 4: 408), and recording drive-related data in the drive zone (paragraphs 138, 142).

Fukushima discloses this allows a drive to obtain appropriate recording and reproducing conditions (paragraph 85).

It would have been obvious to one of ordinary skill in the art to include in Kondo an optimum power control zone, and recording data for optimal power control in the optimal power control zone, and a drive zone, and recording drive-related data in the drive zone, as taught by Fukushima.

The motivation would have been to obtain appropriate recording and reproducing conditions.

8. Claims 3, 4, 7, 15, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroda in view of Fukushima.

Regarding claim 3, 4, 7, and 23:

Kuroda discloses an optical information storage medium as discussed above.

Kuroda does not disclose wherein:

"the area other than the user data area corresponds to a lead-in area, and the new data about the disk state is recorded in the recordable area as a part of the lead-in area," or

"when data about the disk state is updated, the new data about the disk state is recorded in an area next to the an area containing most recently recorded disk state data."

Instead, Kuroda's management areas are before each separate data area (as per Fig. 1a).

Fukushima discloses wherein management data is contained in a lead-in area (Fig. 2), and when data about the disk state is updated, the new data about the disk state is recorded in an area next to an area containing most recently recorded disk state data (as in Fig. 4).

It would have been obvious to one of ordinary skill in the art at the time of the invention to include in Kuroda wherein the area other than the user data area corresponds to a lead-in area, and the new data about the disk state is recorded in the recordable area as a part of the lead-in area, and when data about the disk state is

updated, the new data about the disk state is recorded in an area next to the an area containing most recently recorded disk state data, as taught by Fukushima.

The rationale is as follows:

If the management information is grouped together in the lead-in area, the apparatus can more quickly read it (otherwise, it must advance to multiple, separated parts of the disc to read all of the management information).

Regarding claim 15:

Kuroda discloses an optical information storage medium as discussed in the rejection of claim 1. In Kuroda, the recordable area comprises:

an optimum power control zone to record data for optimal power control (Fig. 2: PCA, PA);

a disk zone to record data about the disk states (Fig. 2: MA).

Kuroda does not disclose a drive zone to record drive-related data.

Fukushima discloses:

a drive zone (Fig. 4: 408), and recording drive-related data in the drive zone (paragraphs 138, 142).

Fukushima discloses this allows a drive to obtain appropriate recording and reproducing conditions (paragraph 85).

It would have been obvious to one of ordinary skill in the art to include in Kuroda a drive zone to record drive-related data.

The motivation would have been to obtain appropriate recording and reproducing conditions.

Response to Arguments

9. Applicant's arguments filed November 16th, 2007 have been fully considered but they are not persuasive.

Regarding claims 1-4, 7, 15, and 30:

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Regarding claims 8-11 and 14:

Applicant's only argument is that claim 8 shares features in common with claim 1. However, these claims were not amended in the same manner as claim 1, and the features applicant referenced in their arguments directed toward the rejection of claim 1 are not present in these claims. Applicant has not identified any feature in claim 8 that it is not present in Kondo.

Regarding claims 22 and 23:

Applicant argues that Kondo does not disclose recording data about the "disk state." However, although Kondo does not use the term "disk state," Kondo nonetheless discloses recording data about the disk state. Every time recording is stopped, Kondo records management information about the latest recording: this information is data about the state of the disk.

Note that, due to amendment, these claims have been additionally rejected as anticipated by or as unpatentable over Kuroda as described above.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher R. Lamb whose telephone number is (571) 272-5264. The examiner can normally be reached on 9:00 AM to 6:30 PM Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CRL 1/28/08

/William Korzuch/
SPE, Art Unit 2627